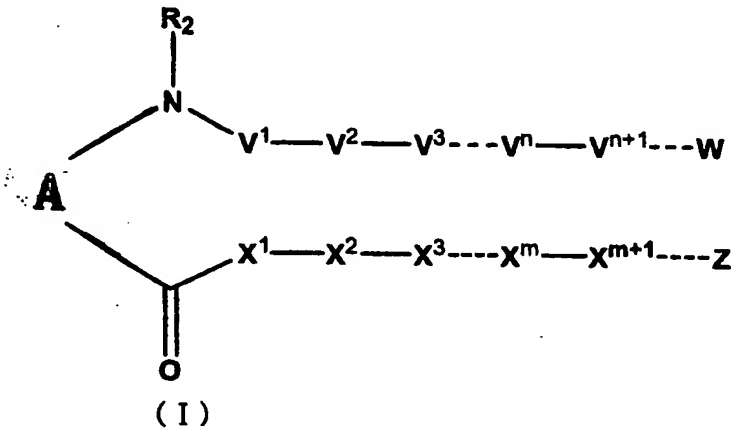
ABSTRACT

The purpose of the present invention is to provide a compound that specifically binds to the base sequence of a double-stranded nucleic acid molecule. The compound can reduce the electrochemical signal/noise ratio (S/N) in electrochemical detection, and as a result, the detection sensitivity (precision) will be greatly improved so as to enable the determination of an ultratrace amount of nucleic acid molecule. The present invention relates to a ferrocene compound represented by the following general formula (I):



(I)

wherein "A" represents a divalent ferrocene-containing linker or ferrocene-1,1'-yl, R_2 represents a hydrogen atom or alkyl; "n" and "m" represent any natural numbers; and "V" and "X" represent the pyrrole-imidazole-polyamide (PIPA); to a ligand consisting of said ferrocene compound

for sequence-specific detection of double-stranded nucleic acid molecules; to a method for electrochemical detection of double-stranded nucleic acid molecules 8 with the use of said ligand; and to an apparatus or device for the electrochemical detection with the use of said ligand.